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ABSTRACT

Beginning teacher education students in two colleges and three universities were asked to describe their knowledge and perceptions of teaching and schools in the following areas: (1) the quality of K-12 schools; (2) characteristics of good and poor schools; (3) levels of school funding; (4) the quality of K-12 teachers; (5) characteristics of K-12 teachers in general; (6) characteristics of good and poor K-12 teachers; (7) salary information on K-12 teachers; (8) reasons for wanting to teach; and (9) workload, conditions, and factors affecting how well teachers like their work. Data are reported from a total of 535 questionnaires completed by undergraduate teacher education students as they attended the initial session of their introductory teacher education course. The data were compared across cohorts within and across institutions. The students rated schools and teachers as average or only slightly above average; they did not know how much teachers make but thought it was less than it really is; and they think that teachers work harder than practicing teachers say they do. For each question, the data are displayed in tables followed by a brief analysis. (JD)

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Professional Knowledge and Perceptions of Beginning Teacher Education Students: Institutional and Group Comparisons

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Paper Presented at the Annual Meeting
of the
American Educational Research Association

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Professional Knowledge and Perceptions
of Beginning Teacher Education Students:
Institutional and Group Comparisons

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Background and Objectives

Recent years have seen the development of a significant and substantial professional knowledge base for the education of teachers (Wittrock, 1986; Reynolds, 1989), and, as a result, numbers of teacher education programs across the United States have been modified. The changes have occurred in what is taught to prospective teachers as well as how it is taught. For example, teacher educators seem to be more in tune than ever before with useful concepts about teacher education, such as Lortie's apprenticeship of observation (1975), Jackson's general complexity of teaching (1986), and Shulman's pedagogy of substance (1989). Surprisingly, however (at least for educators), nearly all of the focus for change in the professional education of teachers neglects to assess the professional knowledge and perceptions teacher education students possess as they start their education.

In light of this situation, we began an inquiry into two basic questions:

(1) What do teacher education students know about teaching and schools when they start studying to be teachers?
(2) How does what they know (and do not know) fit with what they are taught in their teacher education programs?

We found that little is reported in the literature on efforts by teacher education institutions to find out what their beginning teacher education students know about their profession and less is reported of their efforts to fit teacher education instruction with prior knowledge of this sort. Therefore, in the summer of 1988, we initiated a multi-year, gradually expanding study that engages three primary questions:

(1) At the time that they enter teacher education programs, what do teacher education students know and what perceptions do they hold about teaching, schools, and the life and work of teachers?
(2) What do teacher educators know about this prior professional knowledge and perceptions of their students?

(3) How does the content of teacher education instruction fit with the prior professional knowledge and perceptions of the students for which the instruction is intended?

This paper focuses on the first phase (first 18 months) and the first primary question of that study. It reports on a basic assessment of the professional knowledge and perceptions of beginning teacher education students at four colleges/universities.

Perspective

Many teacher education programs have undergone numerous structural, policy, and curricular changes in recent years and much of that change has centered on the professional components of teacher education --expanding teacher preparation to five years; raising admissions and exit standards; restructuring and expanding student teaching/internship experiences; adding, deleting, and modifying courses and course requirements; and so forth. Surprisingly, much of this change seems to have been undertaken without institutional-level assessments of what beginning teacher education students already know about or how they view teaching, schools, and the life and work of teachers.

Central to the preparation of teachers is the teacher educator's ability to identify the knowledge that will serve as a basis for that preparation. Educational researchers and theorists have done a great deal in recent years to establish and expand that knowledge. (Rather than summarize that research in detail, we mention only a few studies for reference purposes.) there are summaries of the empirical research on teaching effectiveness (Brophy & Good, 1986; Rosenshine & Stevens, 1986). Griffin (1986) has provided a composite of the good teacher as being knowledgeable, well-organized, and a classroom leader. Evertson, Neely and Hansford (1990) have described the influences on the ways teachers plan and evaluate students. There are both solid research and theoretical descriptions of cognitive development (Siegel, 1990). and we have a better understanding of what makes an effective school (Brophy & God, 1986; Purkey & Smith, 1983) and an effective teacher (Evertson, 1990).

Although Strickland (1986) studied education majors as they entered teacher education, most researchers who have looked into the beginning stages of teacher preparation have studied novice teachers as they begin teaching--after the undergraduate teacher education program (for example, see Hall, 1984). At the same time, although several investigators have looked at beginning knowledge, or have asked, Where do students start intellectually? What do they know about the profession they are preparing to enter?

Shulman (1987) encouraged us to examine our own conception of what teaching is. He outlined for us the category headings that might help organize this examination:

- content knowledge;
- general pedagogical knowledge, with special reference to those broad principles and strategies of classroom management and organization that appear to transcend subject matter;
- curriculum knowledge, with particular grasp of the materials and programs that serve as, "tools of the trade" for teachers;
- pedagogical content knowledge, that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding;
- knowledge of learners and their characteristics;
- knowledge of education contexts, ranging from the workings of the group or classroom, the governance and financing of school districts, to the character of communities and cultures; and
- knowledge of education ends, purposes, and values, and their philosophical and historical grounds. (Shulman, 1987, p. 8)

As teacher educators are asked to study these important areas of knowledge, we must also ask our own students to begin to assess their understandings in each area. As Shulman has said:

> Teaching is, essentially, a learned profession. A teacher is a member of a scholarly community. He or she must understand the structures of subject matter, the principles of conceptual organization, and the principles of inquiry...(p. 9)

More recently Shulman (1989) stressed the need for teachers to make the subject matter that they teach fit the ideas represented in the heads of their students. It seems to us that this ability is as important for teacher educators as it is for teachers at K-12 levels. To do this, teacher educators need to know what is in the heads of their students in the first place.

Methods and Data Sources

During the summer and autumn of 1988, with the assistance of teacher education faculty colleagues at three other institutions and several graduate student assistants, we developed and administered an instrument designed to assess the knowledge and perceptions of beginning teacher education students about teaching, schools, and the life and work of teachers. The instrument consists of 45 items, some of which are both closed- and open-ended. the content focus of the specific items was selected to match information from three sources: (1) that surveyed in recent versions of the annual Gallup/Phi Delta Kappan poll of the American public's attitudes toward public schools (Gallup, 1986; Gallup & Clark, 1987; Gallup & Elam 1988); (2) that reported in two recent NEA surveys of the status of American public school teachers and of their views of their work (1983, 1987); and (3) the major

concepts that are prominent in each of fifteen chapters of a new introduction to teaching text (Myers & Myers, 1990).

The instrument was administered between September 1988 and July 1989 to teacher education students at Peabody College, Vanderbilt University (a nationally known, research oriented university-based, private college for teachers); Belmont College (a four-year-type, church-affiliated, liberal arts college with an education department); and Austin Peay State University and Middle Tennessee State University (two state institutions in the Tennessee State Regents system with separate colleges of education). The cohorts of student assessed were

(1) first semester freshmen who had just entered the institution and who were attending the initial class session of their first professional education course;
(2) mixtures of freshmen, sophomores, juniors, and seniors who had already taken other coursework at the college/university but were attending the initial class session of their introductory professional course;
(3) juniors, seniors, and master's degree students who had completed most or all of their professional instruction except for student teaching and courses that accompany it (responses from this cohort were used for comparison purposes);
(4) master's degree students who had completed a bachelor's degree program outside of education and at least two other professional education courses and who were attending the first class session of an introductory seminar on teaching and schools prior to participating in an experimental, year-long internship/induction-year experience.

For the study as a whole, data are being compared as follows: (1) across cohorts within and across institutions, (2) across institutions, (3) between the polled students and the people polled in the 1988 Gallup/Phi Kappan poll of Americans' attitudes toward public schools, and (4) between the polled students and the teachers polled in the two NEA surveys. However, this paper reports only on one aspect of the first of these comparisons. Its focus is on the beginning knowledge and perceptions of the teacher education students at the time that they attend the first class of their introductory teacher education course. Some of the data are drawn from the responses of all cohorts and others from a sample of the responses from only the two state university groups.

All students in all cohorts were asked to describe their knowledge and perceptions of teaching and schools in areas such as the following: (1) the quality of K-12 schools; (2) characteristics of good and poor schools; (3) levels of school funding; (4) the quality of K-12 teachers; (5) characteristics of K-12 teachers in general; (6) characteristics of good and poor K-12 teachers; (7) salary information on K-12 teachers; (8) reasons for wanting to teach; and (9) workload, conditions, and factors affecting how well teachers like their work. Responses in all these areas constituted Part I of the survey (the first 31 questions) and are reported in this paper.

The students were also asked to define or explain selected concepts often stressed in introductory teacher education courses, including: student off-task behavior, classroom effectiveness, cognitive development, equity and excellence, educational philosophy, models of instruction, and classroom communication. Responses to that portion of the survey constituted Part II of the survey and are not reported here. We can indicate, however, that large percentages of students in all cohorts did not attempt to define many of the concepts listed, even though they were encouraged to guess; and others were clearly far off base in their responses. More will be reported on this aspect of the study in a different paper.

Findings

Demographic Information

Data reported here are from a total of 535 questionnaires completed by undergraduate teacher education students as they attended the initial session of their introductory teacher education course. The large majority of the respondents reported that they were "just starting" their teacher education program, although some had already taken one or more professional courses.

The group includes the following

180 freshmen*	71 Peabody College
119 sophomores	28 Belmont College
151 juniors	119 Austin Peay State University
35 seniors	317 Middle Tennessee State University

* Not all students classified themselves as freshmen, sophomores, juniors, or seniors; so, the total of these categories does not equal 535.

Responses to Specific Questions

Responses to the questions that could be quantified were tabulated for all of the participants in their introductory course -- 535. Responses to the open-ended questions, at this stage of the study, were tabulated and categorized for only a sample of 100 respondents, 50 each from the two state universities. All of the 100 students had said they were "just starting " teacher education. Those 100 respondents are categorized as follows:

	Austin Peay	Middle Tenn
Freshmen	5	18
Sophomores	17	10
Juniors	20	18
Seniors	6	4
Undesignated	2	0

The categorizing was done after the fact by developing categories based on apparent clusters of responses. Low frequency responses were not clustered and in most cases are not reported here. Those that are reported were often included because we believed the low response was significant in some way.

Responses to the thirty-one questions of Part I of the questionnaire are reported below in succession. The quantifiable data are reported in five ways -- by each individual institution and as a composite total. The open-ended questions are reported three ways -- also by each individual institution and as a composite total. Because some students did not respond to some questions, the numbers and percentages of responses fluctuate from item to item.

Comments, inferences, and explanations appear for each set of responses. Summary statements and conclusions appear in a later section of the paper.

1. *On an A-F scale how would you rate K-12 public schools in the United States today?*

	A	B	C	D	F
Peabody	0.0%	25.5%	57.2%	14.0%	1.4%
Belmont	0.0%	28.6%	53.6%	17.9%	0.0%
Austin Peay	0.9%	40.4%	50.9%	7.0%	0.9%
Middle Tenn.	6.3%	67.0%	16.8%	8.9%	1.1%
Composite	3.2%	49.6%	36.4%	9.9%	1.0%

More than 82% of respondents from all four institutional cohorts responded with *B* or *C*. Those in three cohorts respond *C* more often than any other response and one cohort responded *B* more often. *A* responses in all cohorts were minimal. No one in the two private college cohorts rated schools *A* and those students had noticeably fewer *B* ratings than those of the public institutions.

2. *On an A-F scale how would you rate the K-12 schools you attended?*

	A	B	C	D	F
Peabody	37.3%	44.8%	11.9%	6.0%	0.0%
Belmont	14.2%	57.1%	17.9%	10.7%	0.0%
Austin Peay	6.7%	49.6%	31.1%	12.6%	0.0%
Middle Tenn.	12.1%	45.6%	32.7%	9.3%	.4%
Composite	14.3%	47.0%	28.7%	9.7%	.2%

All cohorts rated their own schools (this question) higher than schools nationally (Question 1), with noticeably higher percentages of *A* ratings.

3. *If your responses to Questions 1 and 2 are different, explain why you think this was the case.*

The responses of the 100 students whose opened responses were categorized were as follows:

	Austin Peay	Middle Tenn.	Total
No Response -- Rated U.S. schools and their own schools the same	25	31	5
Rated own schools higher	17	14	31
Rated own schools lower	8	5	13
	50	50	100

Of the 31 who rated their own schools higher than U.S. K-12 schools, the most frequent explanation -- 15 of the 31 responses -- was something like "my school was better than average" or "my school was very good." Four responses (not included in those 15) made specific reference to good teachers. Interesting single responses were "The quality of education has gotten worse since I was in school." "Many schools in the cities tend to have more problems than rural schools." "I went to predominately white schools where I took honors courses."

Of the 13 who rated their own schools lower, 8 mentioned they had attended rural schools. One responded, "My family isn't rich; I think better education costs money."

4. *Which three characteristics seem to you to be the most important in distinguishing particularly good K-12 schools from all the rest? List your responses in order, naming the most important characteristic first.*

Note: At this point, we have not differentiated among the first, second, and third level of priority that was asked for in this question and other similar questions. Some respondents did not respond three times.

Of 300 total responses, the frequency of responses by category was as follows:

	Austin Peay	Middle Tenn.	Total
Faculty	32	35	67
Relationships/Attitudes toward students	13	15	28
Curriculum	15	11	26
Materials/equipment/facilities	10	10	20
Academic atmosphere/expectations	10	5	15
Discipline/student attitudes/motivation	7	5	12
Student/teacher ratios	6	5	11
Administration	3	7	10
Funding	0	2	2
Other responses	54	55	109
Total responses	150	150	300

Faculty and *Relationships/attitudes towards students* (presumably by faculty) were the most frequently stated distinguishing characteristics of good K-12 schools -- 67 and 28 respectively, for a combined number of 95. *Funding* was rarely mentioned -- 2 of 300 responses -- although the idea of funding was probably in students' minds when they listed other characteristics that require direct funding; for example, *Materials/equipment/facilities.*

5. *Which three characteristics seem to you to be the most critical in distinguishing noticeably poor K-12 schools from all the rest? List your responses in order, naming the most important characteristic first.*

Note: Because several respondents listed more than three responses, there were 313 responses to this question.

Of the 313 responses, the frequency of responses by category was as follows:

	Austin Peay	Middle Tenn.	Total
Faculty	22	30	52
Discipline/poor student attitudes/motivation	18	14	32
Materials/equipment/facilities	14	11	25
Relationships/attitudes toward students	10	14	24
Student - teacher ratios	6	8	14
Curriculum	4	6	10
Funding	3	4	7
Academic atmosphere/ expectations	3	2	5
Administration	1	3	4
Other responses	72	68	140
Total responses	153	160	313

Consistent with responses to Question 4, *Faculty* and *Relationships/attitudes toward students* were the most frequently mentioned distinguishing characteristics of poor K-12 schools -- 52 and 24 respectively for a combined number of 76. The *Discipline/poor student attitudes/motivation*, and/*Materials/equipment/facilities* were also listed frequently, and more often for poor schools (Question 5) than for good ones (Question 4).

6. *What would you consider to be the three most important goals of K-12 schools in the United States today? List your responses in priority order, naming the most important first.*

Of the 300 responses, the frequency of response by category was as follows:

	Austin Peay	Middle Tenn.	Total
Literacy/basic skills	16	19	35
Educate for the future, for life in the "real world"	12	11	23
Educate students	13	10	23
College preparation	10	9	19
Teach Students to want to learn/ teach students how to learn	5	8	13
Education for the jobs	5	6	11
Other responses	89	87	176
Total responses	150	150	300

Possibly the most interesting feature of the responses to this question is the fact that the responses were more diverse on goals for schools (this question) than on characteristics of good and poor schools (Questions 4 and 5). On this question, low frequency responses that were not easily categorized totaled 176 of 300; for Question 4 (good school characteristics) that number was 108 of 300; and for Question 5 (poor school characteristics) that number was 140 of 313.

7. *Funding for K-12 public schools as a whole in America at the present time is:*

	Much too high	Too high	About right	Two low	Much too low
Peabody	0%	2.9%	12.9%	70.0%	14.3%
Belmont	0%	0%	3.7%	88.9%	7.4%
Austin Peay	0%	.9%	15.0%	62.8%	21.2%
Middle Tenn.	0%	2.0%	16.4%	67.9%	13.7%
Composite	0%	1.8%	14.9%	68.2%	15.1%

Probably the only thing to be said here is that responses seem to be what would be expected. In addition, these data provide background for interpreting responses to Question 8.

8. *What is the average, per year expenditure for each student in a K-12 public school in the United States?*

	Under $1,000	$1,000-1,499	$1,500-1,999	$2,000-2,499	$2,500-2,999
Peabody	39.3%	26.8%	3.6%	7.1%	3.6%
Belmont	36.4%	13.6%	4.5%	4.5%	9.1%
Austin Peay	38.9%	13.3%	5.6%	12.2%	2.2%
Middle Tenn.	41.9%	14.1%	5.1%	11.8%	5.5%
Composite	40.7%	15.6%	4.9%	10.9%	4.7%

	$3,000-3,499	$3,500-3,999	$4,000-4,499	$4,500-4,999	$5,000-5,499
Peabody	7.1%	0.0%	0.0%	1.8%	3.6%
Belmont	4.5%	0.0%	4.5%	9.1%	4.5%
Austin Peay	13.2%	0.0%	4.4%	2.2%	3.3%
Middle Tenn.	5.1%	4.3%	1.7%	.7%	3.5%
Composite	6.8%	1.7%	1.7%	1.7%	3.5%

	$5,500-5,900	$6,000- and above	Did not answer this question
Peabody	0.0%	7.1%	20.0%
Belmont	0.0%	9.1%	21.4%
Austin Peay	0.0%	5.5%	24.4%
Middle Tenn.	0.0%	8.6%	19.6%
Composite	0.0%	7.8%	20.9%

The actual figure for 1987-1988 was $4,209 according to *The Condition of Teaching: A State-by-State Analysis, 1988.*

The main conclusion that can be drawn about these responses is that the students were significantly wrong. Sixty-one percent of the estimates were below half of the actual expenditure. Only about 12% estimated within $1,000 of the actual amount. Less than 2% estimated within $200 of the actual expenditure. Of course, tremendous variations of actual expenditures among states could also be a factor.

Fewer students -- 79%-- attempted to answer this question than any other question in the survey, although the students were asked to guess if they did not know the answer. Only 423 of 535 attempted it. It seems that many of these students, apparently as is the case with the American public generally, really have only a vague idea of the dollar costs involved in educating K-12 students.

9. *Should tax money be provided to finance private and church-related K-12 schools?*

	Yes	No	Depends on Circumstances
Peabody	4.3%	53.6%	42.0%
Belmont	15.4%	61.5%	23.1%
Austin Peay	12.9%	62.9%	24.1%
Middle Tenn.	13.6%	57.7%	28.7%
Total	12.3%	58.5%	29.2%

The *No* responses are rather consistent across institutions, which included public and private institutions, including one church affiliated institution (Belmont). However, the Peabody cohort -- a private, non-church-related, expensive institution, with presumably the highest proportion of students who attended private K-12 schools -- had a noticeably lower *Yes* response frequency. That cohort also had a higher *depends on circumstances* response frequency.

10. *On an A-F scale how would you rate K-12 public school teachers in the United States today?*

	A	B	C	D	E
Peabody	3.7%	25.9%	62.9%	7.4%	0.0%
Belmont	3.7%	7.4%	40.7%	14.8%	3.7%
Austin Peay	2.6%	45.6%	46.5%	5.3%	0.0%
Middle Tenn.	2.7%	45.4%	46.4%	5.1%	0.3%
Composite	2.8%	43.1%	47.9%	5.9%	0.4%

Students at the two private colleges rated public school teachers lower than students at public institutions. That may be a result of the fact that higher numbers of these students did not attend public schools, plus a phenomenon similar to that reported in the Gallup/Phi Delta Kappan polls, which is that people tend to rate schools they know personally higher than schools in general. Possibly the students who studied in public schools rated their teachers higher.

11. *On an A-F scale, how would you rate the K-12 teachers who taught you?*

	A	B	C	D	E
Peabody	36.8%	44.1%	17.6%	1.5%	0.0%
Belmont	14.3%	53.6%	28.6%	0.0%	3.5%
Austin Peay	3.5%	59.1%	31.3%	5.2%	0.9%
Middle Tenn.	10.4%	48.5%	30.1%	10.0%	1.0%
Composite	12.5%	50.6%	28.6%	7.2%	0.9%

A significant percentage of the student respondents rated their teachers *C*. The students at the most expensive, private institution rated their own teachers higher than the student cohorts at the other three institutions. In each cohort, the rating of the students' own teachers parallels the rating of their own schools (Question 2).

12. *If your responses to questions 10 and 11 are different, explain why you think this was the case.*

	Austin Peay	Middle Tenn.	Total
No response -- Rated U. S. teachers and their own teachers the same	27	30	57
Rated own teachers higher	17	16	33
Rated own teachers lower	6	4	10
	50	50	100

Thirteen of the 33 who rated their own teachers better said things such as "had many good teachers" or "had above average teachers." Six mentioned being in advanced or honors classes. Only three statements associated the better teachers with the school or the community.

Four of the 10 who rated their own teachers lower mentioned that teachers are better now than when they went to school.

13. *Which three characteristics best describe all K-12 public school teachers?*

	Austin Peay	Middle Tenn.	Total
Loving/kind/patient/understanding	23	22	45
Educated/knowledgeable/intelligent	8	14	22
Underpaid	13	8	21
Dedicated/devoted	5	5	10
Happy with job/like teaching	8	2	10
Overworked	6	3	9
Hardworking	5	2	7
Professional	3	2	9
Other responses	80	89	169
Total Responses	151	147	298

The single incident responses seem to follow no particular pattern. As a whole, the characteristics mentioned are overwhelmingly positive about teachers, probably more positive than the ratings recorded for Question 11. (We wonder if the word "best" in the question might have skewed these answers somewhat.)

14. *Which three characteristics seem to you to be the most important in distinguishing particularly good K-12 teachers from all the rest? List your responses in order, naming the most important characteristic first.*

	Austin Peay	Middle Tenn.	Total
Caring/love students/interested in students understanding/patient	25	29	54
Motivate students/make sure students learn	13	11	34
Educated/knowledgeable/intelligent	11	15	26
Devoted/dedicated	10	4	14
Competent/good teaching methods	5	9	14
Interesting/flexible/have variety	8	4	12
Know, enjoy, interested in subject matter	4	7	11
Like teaching/want to teach	6	3	9
Good relationships with students	0	7	7
Other responses	68	61	129
Total responses	150	150	300

These responses in general seem to parallel those for Question 13. They seem to fit broad descriptions of caring, knowledgeable, and competent. It is interesting that many respondents mentioned *Motivating students/make sure students learn*, and points related to teaching methods and subject matter.

15. *Which three characteristics seem to you to be the most critical in distinguishing noticeably poor K-12 teachers from all the rest? List your responses in order, naming the most important characteristic first.*

	Austin Peay	Middle Tenn.	Total
Don't care about students	31	18	49
"Just a job"/unenthusiastic/apathetic	16	13	29
Don't know subject matter	8	18	26
Don't like, enjoy teaching/burned out	7	9	16
Poor discipline	12	1	13
Not organized	3	8	11
Not intelligent, knowledgeable, educated	7	3	10
Poor teaching skills, abilities	5	3	8
Poor relations with students	0	7	7
Other response	66	70	136
Total responses	155	150	305

For the most part, the responses to Question 15 seem to be consistent with those mentioned about good teachers (they note contrary conditions) but it is interesting to see that *Poor discipline* and *Not organized* show up frequently on the poor characteristics list (Question 15) but their opposites do not show up as good characteristics. Of course, most educators would agree that the lack of classroom control and organization are more conspicuous than their presence.

16. *Currently, salaries for teachers in K-12 public schools are*

	Much too high	Too high	About right	Two low	Much too low
Peabody	0%	2.9%	2.9%	63.8%	30.4%
Belmont	0%	0%	7.4%	62.3%	29.6%
Austin Peay	0%	0%	7.8%	74.8%	17.4%
Middle Tenn.	0%	.4%	5.9%	71.3%	22.4%
Composite	0%	.6%	6.0%	70.6%	22.7%

The responses seem not to be surprising and rather consistent across cohorts. The responses parallel those about funding for public schools (Question 7) but, for three of the four cohorts, the percentage who think teacher salaries are much too low is higher than the comparable percentage for school funding.

17. *What is the average annual salary for beginning (first year) K-12 public school teachers in the United States this year? (Assume the teacher has a bachelor's degree, is certified to teach but has no post graduate coursework and no previous teaching experience as a paid teacher.)*

	Below $15,000	$15,000-15,999	$16,000-16,999	$17,000-17,999	$18,000-18,999
Peabody	25.0%	9.4%	9.4%	10.9%	17.2%
Belmont	37.0%	14.8%	7.4%	25.9%	7.4%
Austin Peay	16.8%	23.0%	12.4%	5.3%	26.5%
Middle Tenn.	25.3%	10.7%	13.0%	10.7%	22.7%
Composite	24.0%	13.4%	12.1%	10.3%	22.1%

	$19,000-19,999	$20,000- and above
Peabody	7.8%	20.3%
Belmont	0%	7.4%
Austin Peay	.9%	15.0%
Middle Tenn.	4.2%	13.3%
Composite	3.7%	14.1%

The actual average beginning salary for K-12 public school teachers for 1987-88 was $17,500, according to Snyder (1987, p.293.)

About 24% of the students surveyed underestimated beginning salaries significantly by saying the beginning point was below $15,000. In fact, nearly 3% said salaries were below $10,000; and another almost 13% said they were between $10,000 and $13,000. Obviously, these people are uninformed even though they plan to be teachers. The spread among estimates above $15,000 can be explained somewhat by the fact that different students know of and possibly are planning to seek jobs in school systems with greatly varying starting salaries. Their estimates could be accurate for the jobs they have in mind. The Belmont cohort estimate seems to be noticeably low. At the other extreme, the 3.5 % who said beginning salaries were over $25,000 are apparently also uninformed.

It is probably worth nothing that all cohorts as groups were closer to being accurate on beginning salaries than on school funding (Question 8).

18. *What is the average annual salary for all K-12 public school teachers in the United States this year?*

	Below $15,000	$15,000-15,999	$16,000-16,999	$17,000-17,999	$18,000-18,999
Peabody	7.8%	0%	1.6%	7.8%	6.3%
Belmont	15.4%	0%	11.5%	19.2%	15.4%
Austin Peay	4.5%	4.5%	5.4%	3.6%	19.6%
Middle Tenn.	7.3%	4.9%	5.9%	5.9%	14.9%
Composite	7.2%	3.9%	5.5%	6.4%	15.1%

	$19,000-19,999	$20,000-20,999	$21,000-21,999	$22,000-22,999	$23,000-23,999
Peabody	6.3%	15.6%	6.3%	7.8%	4.6%
Belmont	3.8%	15.4%	0%	0%	3.8%
Austin Peay	4.2%	20.5%	2.7%	8.0%	5.4%
Middle Tenn.	8.0%	17.7%	3.8%	7.3%	4.2%
Composite	6.8%	18.1%	1.6%	7.2%	4.5%

	$24,000-24,999	$25,000-25,999	$26,000-26,999	$27,000-27,999	$28,000-28,999
Peabody	1.6%	6.3%	3.1%	1.6%	6.3%
Belmont	7.7%	7.7%	0%	0%	0%
Austin Peay	3.6%	9.8%	.9%	0%	3.6%
Middle Tenn.	4.2%	10.1%	1.4%	.7%	.7%
Composite	3.9%	9.5%	1.4%	.6%	2.1%

	$29,000-29,999	$30,000-30,999	$31,000-31,999	$32,000-32,999	$33,000-33,999
Peabody	0%	6.3%	0%	0%	0%
Belmont	0%	0%	0%	0%	0%
Austin Peay	0%	.9%	0%	.9%	0%
Middle Tenn.	.7%	2.1%	0%	.3%	0%
Composite	.4%	2.2%	0%	.4%	0%

	$34,000-34,999	$35,000-and above
Peabody	1.6%	9.4%
Belmont	0%	0%
Austin Peay	0%	1.7%
Middle Tenn.	.3%	1.4%
Composite	.4%	2.5%

The actual average salary for K-12 public school teachers for 1987-88 was $28,031, according to *The Condition of Teaching: A State-by State Analysis, 1988.*

All of the cohorts estimates were considerably low, some individual responses unbelievably low. Seven and two-tenths percent said the salary was under $15,000, nearly 50% of its actual amount; and 44.9% said it was under $20,000, more than $8,000 below the actual figure. The fact that all participants attend college in Tennessee and the Southeast may explain part of this underestimate, but the gap is too large to be explained away only on those terms. In any event, only 10% of the respondents did not underestimate by more than $2,000 and only 8% estimated the average salary at its actual point or higher. One-third of those who overestimated did so by an amount of more than $5,000.

We were surprised by these responses. We do not know how to explain them, but we believe that beginning teacher education students need to be informed on this point quickly. We also worry about how many people avoid a career in teaching based on similarly inaccurate salary information. We speculate that the misinformation is about salaries as a whole, not just those of teachers. Responses to the next two questions shed light on this speculation.

19. *How does the average annual salary for teachers compare with the average annual salary for other professions that require at least 4 years of college -- such as business people, engineers, nurses? The teaching salary is*

	Much too high	Too high	About right	Too low	Much too low
Peabody	0%	0%	1.4%	52.2%	46.4%
Belmont	0%	0%	0%	53.6%	46.4%
Austin Peay	0%	0%	2.6%	44.8%	52.6%
Middle Tenn.	.3%	2.0%	3.4%	43.9%	50.3%
Composite	.2%	1.2%	2.7%	50.1%	45.8%

20. *In round figures, about how much difference is there between teachers' salaries and the averages of the others?*

	Less than $1,000	$1,000-1,999	$2,000-2,999	$3,000-3,999	$4,000-4,999
Peabody	0%	0%	1.5%	0%	6.2%
Belmont	0%	0%	7.7%	0%	3.8%
Austin Peay	0%	1.0%	3.0%	7.0%	6.0%
Middle Tenn.	4.3%	.5%	4.3%	7.5%	3.8%
Composite	2.2%	.5%	3.7%	5.7%	4.6%

	$5,000-5,999	$6,000-6,999	$7,000-7,999	$8,000-8,999	$9,000-9,999
Peabody	9.2%	1.5%	7.6%	1.5%	0%
Belmont	26.9%	3.8%	7.7%	7.7%	0%
Austin Peay	17.2%	6.0%	6.0%	9.1%	2.0%
Middle Tenn.	18.5%	5.2%	5.7%	4.7%	1.4%
Composite	17.2%	4.7%	6.2%	5.5%	1.2%

	$10,000-10,999	$11,000-11,999	$12,000-12,999	$13,000-13,999	$14,000-14,999
Peabody	19.0%	0%	1.5%	0%	0%
Belmont	15.4%	0%	0%	0%	0%
Austin Peay	28.3%	0%	1.1%	0%	0%
Middle Tenn.	28.3%	0%	.4%	0%	0%
Composite	29.8%	0%	.7%	0%	0%

	$15,000 and above
Peabody	39.8%
Belmont	23.1%
Austin Peay	8.7%
Middle Tenn.	15.4%
Composite	17.7%

In 1987, the differences between teachers' average first-year salaries and the first-year 12 month salary of several other professions that require four years of college were

			Difference
Teaching - $17,500	Business	$21,324	$ 3,824
	Engineering	$28,512	$11,012
	Sales/Marketing	$20,688	$ 3,188
	Computer Specialist	$26,172	$ 8,672

(Snyder, 1987, p. 293)

The responses to Questions 19 and 20 seem to be consistent with each other and across cohorts. Although there are great ranges of distribution, the responses do not seem to be as uniformed as the responses to Question 18. This leads us to infer that these teacher education students understand the comparative place of teacher salaries among professional salaries better than they know actual dollar amounts of salaries in general. (We wish we would have asked for estimates of salaries of other professions, but that type of question was not included because it appeared to us to be too speculative. We now think the estimate of teachers' salaries was more speculative than we had thought.)

21. *How strongly do you feel about wanting to be a teacher?*

	Very strongly	Want to be	Not sure	Probably not	Will not
Peabody	54.3%	31.4%	11.4%	2.9%	0%
Belmont	64.3%	25.0%	7.1%	3.6%	0%
Austin Peay	76.1%	19.7%	3.4%	0%	.9%
Middle Tenn.	64.1%	29.7%	6.2%	0%	0%
Composite	65.6%	27.3%	6.3%	.6%	.2%

22. *Explain your response to Question 21.*

Of those who responded *Very strongly* to Question 21, the reasons given in response to Question 22 were the following:

	Austin Peay	Middle Tenn.	Total
Love children	6	7	13
Always wanted to teach	6	7	13
Want to work with children	5	4	9
Want to help (without reference to children)	2	4	6
Other responses	15	10	25
Total responses	34	32	66

23. *If you do want to be a teacher (at any degree of feeling), what prompted you to make this decision?*

	Austin Peay	Middle Tenn.	Total
Past experience with children or teaching/ like working with children	18	9	27
Because of past teacher (good ones/bad ones)	7	5	12
Love children	4	7	12
To make a difference/want to help others	4	6	11
Have relative who teaches	3	5	8
Like subject matter	3	3	6
Good hours and work schedule	3	3	6
Other responses	5	10	15
Total responses	49	48	97

All of the reasons given in response to Question 22 by those who felt strongly about being a teacher that could be clustered meaningfully can be characterized as altruistic reasons. No "strong believers" listed subject matter interest as their reason, although such types of statements were used to characterize good teachers (Question 14) and mentioned for Question 23.

Question 23 responses were mostly altruistic reasons, and about half specifically mentioned children. Past teachers (good and bad) and *Have relatives who teach* were significant influences. Subject matter interest and working hours and schedules were factors for a few.

24. *Why do you think most people your age do not want to be teachers?*

	Austin Peay	Middle Tenn.	Total
Low pay	33	39	72
Do not like children	9	3	12
Long hours/hard work	7	1	8
Lack of recognition, respect, status	4	3	7
Discipline/student behavior	3	2	5
Did not like school	2	1	3
Other responses	9	10	19
Total responses	67	59	126

25. *Explain why you think you feel differently from the people referred to in Question 24. (Those who do not want to teach)*

	Austin Peay	Middle Tenn.	Total
Job more interesting than money	22	30	52
I love, like children	9	2	11
Teaching is a second income for my family	1	0	1
Other responses	17	14	31
Total responses	49	46	95

Responses to Questions 24 and 25 indicate that the respondents' perceptions of the factors that separate themselves from those who do not want to teach are essentially two: Pay and interest in children.

26. *In recent surveys teachers have been asked if they are satisfied with their job or not. What percentage of teachers do you think said they were satisfied?*

The percentage of actual teachers who said they were satisfied in 1987-88 was 77%, according to *The Condition of Teaching: A State-by-State Analysis, 1988.*

The student estimates were somewhat low as a whole but probably not surprisingly low given the general tone of recent media and political discussions about teacher satisfaction.

	Below 25%	25%-49%	50%-59%	60%-69%	70%-79%
Peabody	3.0%	29.9%	9.0%	17.9%	19.4%
Belmont	3.6%	42.9%	3.6%	28.6%	14.3%
Austin Peay	3.4%	17.1%	14.5%	26.5%	18.8%
Middle Tenn.	.4%	22.5%	13.3%	18.9%	23.8%
Composite	1.6%	23.3%	12.5%	20.9%	21.5%

	80%-89%	90%-100%
Peabody	16.4%	4.5%
Belmont	7.1%	0%
Austin Peay	16.2%	3.4%
Middle Tenn.	14.4%	6.7%
Composite	14.7%	5.2%

27. *What do you think most teachers consider the primary rewards for teaching? (List one or more but list them in priority order, the most important reason listed first.)*

	Austin Peay	Middle Tenn.	Total
Seeing students learn, grow, achieve, succeed	23	29	52
Sense of satisfaction	15	11	26
Helping students/making a difference in children's lives	10	16	26
Hours/schedule	7	9	16
Helping others	4	9	13
Being involved with children	7	3	10
Job security	1	3	4
Being liked by students	2	0	2
Other responses	51	36	87
Total responses	120	116	236

28. *What do you think most teachers consider the primary negative aspects of teaching? (List one or more but list them in priority order, the most important reason listed first.)*

	Austin Peay	Middle Tenn.	Total
Low pay	27	31	58
Discipline problems	16	19	35
Poor student attitude/student apathy	12	13	25
Poor parent attitude, support	7	10	17
Lack of funds for school materials, etc.	15	3	18
Lack of support, recognition	8	6	14
Long hours/hard work	4	5	9
Paper work/red tape	2	3	5
Drugs	2	1	3
Not much opportunity for advancement	1	2	3
Other responses	24	20	44
Total responses	118	113	231

The responses to Questions 27 and 28 that could be clustered seem to be consistent with that practicing teachers say about their assessment of the rewards and negative aspects of their jobs. The respondents and practicing teachers both say primary rewards include a feeling of satisfaction, a sense of helping and doing something worthwhile, and interaction with children. Both also list primary negatives as low pay, lack of respect and recognition, and discipline.

It is interesting to note that two items that the media and politicians mention often as negatives -- drugs and lack of opportunities for advancement -- were each mentioned by only 3 of the 100 respondents.

29. *How many total hours a week during the school year does the average teacher work at teaching chores? (Consider in-school and out-of-school work.)*

	40 or below	41-45	46-50
Peabody	3.5%	15.8%	35.1%
Belmont	4.1%	8.3%	33.3%
Austin Peay	8.7%	12.6%	24.2%
Middle Tenn.	8.6%	15.0%	27.0%
Composite	7.7%	14.1%	27.8%

	51-55	56-60	Above 60
Peabody	17.5%	15.7%	12.2%
Belmont	4.1%	37.5%	12.5%
Austin Peay	9.7%	24.2%	20.4%
Middle Tenn.	12.0%	20.0%	17.6%
Composite	11.7%	21.3%	17.3%

According to *The Condition of Teaching: A State-by-State Analysis, 1988*, 78% of practicing teachers said they worked between 40 and 50 hours a week at their job, although common discussion among teachers suggests a higher number of hours.

The responses to Question 29 suggest that many of the teacher education student respondents think teachers work more hours than the practicing teachers say they do. However, the ranges may say more about variations among teachers and differences between beginning and experienced teachers than anything else.

Based on the numbers reported here, the beginning teacher education students surveyed think teachers work longer hours than teachers say they do, and they believe teachers are paid less than they actually are. Yet, these respondents want to be teachers.

29a *Of those hours how many are for work in school?*

	30 or below	31-35	36-40
Peabody	16.1%	25.8%	41.9%
Belmont	8.3%	29.2%	50.0%
Austin Peay	14.4%	24.8%	48.1%
Middle Tenn.	13.5%	20.9%	47.6%
Composite	13.9%	23.0%	47.2%

	41-45	46-50	Above 50
Peabody	9.6%	6.4%	0%
Belmont	4.2%	8.3%	0%
Austin Peay	5.8%	5.8%	1.9%
Middle Tenn.	8.3%	6.9%	2.6%
Composite	7.7%	6.7%	1.9%

29b *How many are for work out-of-school?*

	5 or below	6-10	11-15
Peabody	3.5%	33.3%	29.8%
Belmont	4.1%	16.6%	25.0%
Austin Peay	4.9%	26.7%	17.8%
Middle Tenn	6.9%	32.9%	22.1%
Composite	5.8%	30.5%	32.3%

	16-20	21-25	Above 25
Peabody	15.8%	14.0%	3.5%
Belmont	41.6%	0%	12.5%
Austin Peay	25.7%	9.9%	14.8%
Middle Tenn.	21.2%	8.6%	8.2%
Composite	22.7%	9.2%	9.4%

The responses to Questions 29a and 29b appear to be consistent with those for Question 29 and rather close to what might normally be expect from people who see teachers as conscientious, hard workers.

30. *What do most teachers do in the summer when school is not in session?*

	Austin Peay	Middle Tenn.	Total
Summer job	19	25	44
Take classes/attend workshop/attend inservice programs	17	15	32
Relax/spend time with family	20	9	29
Vacation/travel	14	9	23
Teach summer school/semester	7	7	14
Plan, prepare for next year	12	0	12
Other responses	2	2	4
Total responses	91	67	158

We saw no surprise with this set of responses.

31. *Nationally what is the average student-to-teacher ratio in regular classrooms in the United States?*

Elementary Ratios

	14 or below	15-19	20-24
Peabody	2.8%	11.5%	27.5%
Belmont	7.1%	3.6%	14.3%
Austin Peay	.9%	2.7%	12.7%
Middle Tenn.	5.4%	1.1%	19.4%
Composite	4.1%	3.2%	18.8%

	25-29	30-34	35 or more
Peabody	36.2%	21.7%	0%
Belmont	57.1%	14.3%	3.6%
Austin Peay	38.2%	27.2%	16.3%
Middle Tenn.	41.6%	19.0%	13.2%
Composite	41.0%	21.1%	11.4%

Secondary Ratios

	14 or below	15-19	20-24
Peabody	2.8%	1.4%	14.4%
Belmont	7.1%	0%	7.1%
Austin Peay	0%	0%	5.7%
Middle Tenn.	4.3%	.4%	4.6%
Composite	3.2%	.4%	6.3%

	25-29	30-34	35 or more
Peabody	18.8%	40.5%	21.7%
Belmont	21.4%	39.2%	25.0%
Austin Peay	15.2%	47.6%	31.4%
Middle Tenn.	13.1%	40.2%	37.3%
Composite	14.8%	41.6%	32.9%

According to the practicing teachers who responded in *The Condition of Teaching: A State-by-State Analysis, 1988*, a typical class had 23 students and a typical secondary school teacher taught 114 students in a day. If we assume those 114 students were distributed over 5 class periods, that ratio would be 22.8. To the extent that these figures are accurate, most respondents to Question 31 overestimated slightly the number of students in a typical elementary school class, and overestimated to a greater degree the number of students in a typical secondary school class.

Summary and Conclusions

The knowledge and perceptions about teaching, schools, and the life and work of teachers of the beginning teacher education students surveyed in this study can be summarized as follows:

(1) They generally rated U.S. K-12 public schools and teachers as C or B but rated the schools they attended and their own teachers somewhat higher. The students at the two state universities rated their own schools and teachers primarily as B with few A's, while those who attended the most expensive and "selective" institution (presumably including the most students who attended K-12 private schools) rated their schools and teachers A more frequently.

(2) They considered faculty and faculty-student relationships to be key characteristics of good K-12 schools, and mentioned funding sparingly on this point.

(3) They considered faculty, discipline, and student attitudes to be key characteristics of poor K-12 schools, and (again) mentioned funding only sparingly.

(4) They, as a group, really did not know how much money is spent on schools, but a large majority believe it is not enough.

(5) Most opposed tax money for private K-12 schools, even those who attended private K-12 schools.

(6) They described K-12 public school teachers most frequently as caring, kind, patient, understanding, dedicated and/or devoted; and did so more frequently than they described them as educated, knowledgeable, and/or intelligent.

(7) They described K-12 public school teachers generally with many of the same terms as they used to describe good K-12 public school teachers.

(8) They described poor K-12 public school teachers as uncaring about students, unenthusiastic, apathetic, and not knowledgeable of subject matter.

(9) They were surprisingly uninformed about the actual dollar amounts of teacher salaries and noticeably underestimated both beginning and average salaries. At the same time, however, they were closer to the

mark when they compared the differences between teacher salaries and those of other professionals.

(10) Their main reasons for wanting to teach were altruistic reasons, usually focused on helping children.

(11) They thought the main reason others do not want to teach is low pay.

(12) Their assessment of the degree of satisfaction that practicing teachers express for their jobs, and their ideas of what those teachers see as the rewards and negative aspects of their jobs are not far off the mark when compared to one national survey of practicing teachers.

(13) They estimate that teachers work longer hours and teach larger numbers of students than practicing teachers reported in one national survey.

In sum, these teacher education students rate schools and teachers as average or only slightly above average, they really do not know how much teachers make but think it is less than it really is, they think teachers work harder than practicing teachers say they do; yet, they want to be teachers. On most other points surveyed, their perceptions are rather similar to conventional wisdom.

Significance

Data collected so far have begun to shed a little light on the perceptions of beginning teacher education students at the four institutions studied. These data need to be compared to others already collected in this study and to be collected in its next stages. It is too early to formulate meaningful generalizations.

However, this study could serve as an example for other teacher educators who seek similar information about their own students. If others gather information of this type, they may be able to make better informed decisions as they plan their teacher education courses.

If like-minded individuals begin to share their information, we might begin to develop a knowledge base about the knowledge and perceptions of our beginning teacher education students.

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